laminations, the coils, as single-tooth coils, on the one hand have an only slight axial winding cap length and protrusion, and on the other, together with the contact bridges, better commutation and hence a longer service life are attained.

Please delete paragraph [0008].

Please replace paragraph [0009] with the following amended paragraph:

[0009] **Advantageous features and refinements of the basic machine are disclosed.** For instance, with a view to high torque development, an especially favorable distribution of flux in the coils is obtained because the coils that are adjacent as viewed in one direction of rotation are placed with their beginnings and ends on the laminations that are adjacent as viewed in the other direction of rotation. Expediently, the beginnings and ends of the adjacent coils are placed in alternation directly and indirectly, respectively, on adjacent laminations via one of the contact bridges. It is also advantageous for the production of the coils by automatic winders if the coils disposed on adjacent pole teeth are each connected directly or indirectly in series with one another via one of the contact bridges. ~~Expediently~~ **Preferably**, the adjacent coils are connected in series with one another in alternation directly and via one of the contact bridges, respectively. In an especially simple way, all the coils and contact bridges are produced continuously from one winding wire, and expediently the coils and contact bridges are continuously wound in alternation by means of automatic winders.

Page 4, please replace paragraph [0011] with the following amended paragraph:

[0011] ~~Drawing~~ **BRIEF DESCRIPTION OF THE DRAWINGS**

Please replace paragraph [0012] with the following amended paragraph:

[0012] The invention is described in further detail as examples below, in conjunction with the drawings, **in which:** [[.]] ~~In the drawings~~:

Please replace paragraph [0013] with the following amended paragraph:

[0013] Fig. 1 shows an electrical machine according to the invention in a front **end** elevation view;

Page 5, please replace paragraph [0015] with the following amended paragraph:

[0015] Fig. 3 shows the winding plan for the rotor of Fig. 2;[[.]]

Please replace paragraph [0016] with the following amended paragraph:

[0016] Fig. 4 shows [[the]] **a** second exemplary embodiment the rotor of Fig. 2, but with coils wired differently; [[and]]

Please replace paragraph [0017] with the following amended paragraph:

[0017] Fig. 5 shows the corresponding winding plan for [[this.]] **the embodiment of Fig. 4; and**

Please replace paragraph [0018] with the following amended paragraph:

[0018] Fig. 6 shows, as [[the]] **a** third exemplary embodiment, a three-part winding plan for the six coils of one rotor of Fig. 2, with a further variant of the wiring.

Please replace paragraph [0019] with the following amended paragraph:

[0019] ~~Description of the Exemplary Embodiments~~

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Page 6, please replace paragraph [0021] with the following amended paragraph:

[0021] Fig. 2, in a first exemplary embodiment of the invention, **schematically** shows the rotor 13 from the back in an enlarged view. A commutator 16 is located there, with twelve laminations L distributed uniformly over the circumference and cooperating with two stationary carbon brushes B1 and B2. The carbon brushes are offset from one another by 90° and are supplied with direct current for the operation of the electrical machine. To make the power supply to the rotor symmetrical in a quadrupole machine and to assure this with only one pair of brushes, the respective laminations L diametrically opposite one another in the commutator 16 are each joined together via separate contact bridges K. There, the six coils are designated S1 through S6, the six pole teeth are designated Z1 through Z6, and the six slots are designated N1 through N6.

Please replace paragraph [0022] with the following amended paragraph:

[0022] For a favorable magnetic flux through the rotor by means of the six coils [[N]] **S**, an even number of coils is of importance; this is because, given the simultaneous commutation of what are now coils S diametrically opposite one another, the radial force components caused by the commutation at the diametrically opposed teeth Z add up to zero. Moreover, for attaining the highest possible torque development on the rotor circumference, the wiring of the coils S to the commutator laminations L is of importance. It is provided that, of the coils S located on adjacent pole teeth Z, the beginning and end of one coil S is connected directly to adjacent laminations L, and the beginning and end of the other coil S is connected to adjacent laminations L via one of the contact bridges K. Moreover, the coils S located on adjacent pole

teeth Z are each connected in series with one another in alternation directly and indirectly, respectively, via one of the contact bridges K.

Page 8, please replace paragraph [0026] with the following amended paragraph:

[0026] Beginning with the coil S1 in Figs. 2 and 3, the winding wire 17 is first secured to the lamination L1; then the beginning of the coil S1 is laid through the slot N1, then 42 windings are wound around the pole tooth Z1, and then the coil end is secured through the slot N6 to the lamination L12. Next, without interrupting the coil wire, the first contact bridge K1 is laid from the lamination L12 to lamination L6. From there, the beginning of coil S2 is laid through the slot N1; the coil S2 is wound with 42 windings around the tooth Z2, and the end is passed through slot **N**2 to the lamination L11. Next, from there, the contact bridge K2 is laid from the lamination **L**11 to the lamination L5. From there, the beginning of the coil S3 is then laid through the slot N3; the coil is wound with 42 windings around the tooth Z3; and the end is laid through the slot N2 to the lamination L4. The bridge K3 then follows from the lamination L4 to the lamination L10. Next, the beginning of the coil S4 is laid from lamination **L**10 through the slot N3; the coil is wound with 42 windings around the tooth Z4; and the end is laid through the slot N4 onto lamination L3. The contact bridge K4 then follows from the lamination L3 to the lamination L9. From there, the beginning of the coil S5 is laid through the slot N5; the coil is wound with 42 windings on the pole tooth Z5; and the coil end is laid through slot N4 onto lamination L8. The contact bridge K5 then follows from the lamination L8 to lamination L2. Next, the coil S6 is laid with its beginning from the lamination L2 through the slot N5, and wound with 42 windings onto the pole tooth Z6, and

the end is laid through the slot N6 onto lamination L7. Finally, the contact bridge K6 is then also laid from the lamination L7 onto lamination 1. The winding wire is finally severed here. For better clarity, the slots N and laminations L are numbered consecutively in Fig. 3.

Page 12, please replace paragraph [0030] with the following amended paragraph:

[0030] The winding wire 17 is first secured to the lamination L1, and the beginning of the coil S1 is then laid from the lamination L1 through the slot N6; the coil is wound with 42 windings onto the pole tooth Z1; and the end is laid through the slot N1 onto the lamination L12. Without interruption, the contact bridge K1 now follows from the lamination L12 to the lamination L6. After that, the coil S2 is wound with its beginning from the lamination L6 through the slot N2 with 42 windings around the tooth Z2, and the end is laid through the slot N1 onto the lamination L11. Next, the contact bridge K2 follows, from the lamination L11 to the lamination L5. Then the beginning of the coil S3 is laid from the lamination L5 through the slot N2; the coil is wound with 42 windings onto the pole tooth Z3; and the end is laid through the slot N3 onto the lamination L4. After that, the contact bridge K3 is laid from the lamination L4 onto the lamination L10. Now the beginning of the coil S4 is laid from the lamination L10 through the slot N4; the coil is wound with 42 windings around the pole tooth Z4; and the end is laid through the slot N3 onto the lamination L3. The contact bridge K4 follows from the lamination L3 onto the lamination L9. Then the coil S5 is laid with its beginning from the lamination L9 through the slot N4; the coil is wound with 42 windings onto the pole tooth Z5; and the end is laid through the slot N5 onto the lamination L8. The coil S6 is now shifted with its beginning from the lamination L2 through the slot N6 and then

wound with 42 windings around the pole tooth Z6, and the end is laid through the slot N5 onto the lamination L7. Finally, the contact bridge K6 also follows, which is laid from the lamination L7 to the lamination L1. The rotor winding is now complete, and the winding wire 17 is capped on the lamination L1.

Page 13, please replace paragraph [0031] with the following amended paragraph:

[0031] In Fig. 6, a further exemplary embodiment is shown for the wiring of the coils S and contact bridges K on the rotor 13 of Fig. 2. Fig. 6 shows the winding plan, which for greater clarity is broken down into portions a, b and c. Portion a shows a first winding pass with the coils S1 and S2 and the contact bridges K1 and K2. The portion b shows a further, ensuing winding pass with the coils S3 and S4 and the contact bridges K3 and K4. The portion c, finally, shows the then-ensuing final winding pass with the coils S5 and S6 and the contact bridges K5 and K6. It can be seen here that the beginnings and ends of the coils are laid in part, and the contact bridges K are laid completely, away from the commutator side through slots N onto the side of the rotor 13 facing away from the commutator. The contact bridges K are wrapped around two pole teeth Z each on the back side of the rotor. In this exemplary embodiment as well, all the coils S and contact bridges K are meant to be produced in a continuously wound way with a winding wire 17 by means of automatic winders, which will now be explained with the aid of Winding Table 4. In accordance with the winding plan of Fig. 6, the winding table is also broken down **below** into portions **corresponding to winding plan portions** a, b and c. Accordingly, the following sequence of steps results:

Page 14, please replace paragraph [0032] with the following amended paragraph:

[0032] First, in portion a of the winding plan, the winding wire 17 is put in contact with the lamination L1, and the beginning A of the coil S1 is laid in the slot N6, and after that 42 windings are wound around the tooth Z1, and then the end is laid through the slot N1 onto the lamination L12. The contact bridge K1 now follows, which is laid from the lamination L12 through the slot N6 to the back side of the rotor and from there is passed through the slot N4 to the lamination L6. From the lamination L6, the coil S2 is now passed with its beginning through the slot N3 to the back side of the rotor and from there to the slot N1; then via the slot N2, 41 windings are wound onto the pole tooth Z2, and finally, the end is laid from the slot N2 via the back side of the rotor to the slot N6 and from there finally to the lamination L11. The bridge K2 now follows, which is passed from the lamination L11 through the slot N5 to the back side of the rotor and from there via two teeth is passed back through the slot N3 and to the lamination L5. This is then continued in portion b of the winding plan from the lamination L5. From there, the beginning of the coil S3 is passed through the slot N2, and the coil is wound with 42 windings around the pole tooth Z3; the end is laid through the slot N3 onto the lamination L4. The contact bridge K3 follows, which is laid from the lamination L4 through the slot N2 onto the back side of the rotor, is passed from there via two teeth Z through the slot N6, and is then laid onto the lamination L10. The coil S4 follows, which is passed with its beginning from the lamination L10 through the slot N5 and on to the back side of the rotor to the slot N3, then through the slot N4 is wound with 41 windings around the tooth Z4; the end is then transferred from the slot N4 to the slot N2 via the back side of the rotor and finally is laid on the lamination L3. The contact bridge K4 follows, which is passed

from the lamination L3 via the slot N1 to the back side of the rotor and from there via two pole teeth Z is laid through the slot N5 to the lamination L9. In the third portion c of the winding plan, the coil S5 then follows; first, the beginning is laid from the lamination L9 through the slot N4; the coil is wound with 42 windings; and then the end is laid through the slot N5 onto the lamination L8. From there, the contact bridge K5 follows, which is passed from the lamination L8 through the slot N4 to the back side of the rotor and from there across two pole teeth Z is passed through the slot N2 and laid on the lamination L2. The coil S6 now follows, whose beginning is passed from the lamination L2 through the slot N1 to the back side of the rotor and from there, via the slot N5 and the slot N6, is wound with 41 windings around the tooth Z6, and the end is laid from the slot N6 via the back side of the rotor through the slot N4 onto the lamination L7. Finally, the contact bridge K6 is now also passed from the lamination L7 through the slot N3 onto the back side of the rotor and from there is passed back again through the slot N1 via two pole teeth Z. From there, the end E of the winding wire then reaches the lamination L1 again.

Page 17, please add the following new paragraph after paragraph [0035]:

[0036] The foregoing relates to a preferred exemplary embodiment of the invention, it being understood that other variants and embodiments thereof are possible within the spirit and scope of the invention, the latter being defined by the appended claims.